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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,004

03/12/2004

Robert A. Gonsalves

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11/26/2008

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EXAMINER

NGUYEN, LUONG TRUNG

ART UNIT

PAPER NUMBER

2622

MAIL DATE

DELIVERY MODE

11/26/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/798,004	<b>Applicant(s)</b> GONSALVES, ROBERT A.	
	<b>Examiner</b> LUONG T. NGUYEN	<b>Art Unit</b> 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-3 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Objections*

1. Claims 1-3 are objected to because of the following informalities:

Claim 1 (line 3), “an imaging system” should be changed to --the imaging system--.

Claim 1 (lines 8-9), “canceling aberrations introduced by said medium, aberrations such as those caused by a turbulent atmosphere” should be changed to --canceling aberrations introduced said changing optical medium, wherein the aberrations caused by a turbulent atmosphere --.

Claim 1 (line 15), “a sequential diversity processor” should be changed to --the sequential diversity processor--.

Claim 2 (line 5), “the residual aberrations” should be changed to --residual aberrations--.

Claim 2 (line 7), “that estimate” should be changed to --the estimate--.

Claim 3 (lines 3-4), “the control signal” should be changed to --a control signal--.

Claims 2-3 are objected as being dependent on claim 1.

Appropriate correction is required.

2. Claim 4 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 1, 2 and 3. See MPEP § 608.01(n). Accordingly, the claim 4 has not been further treated on the merits.

Further the recitation on the last four lines in claim 4 “The sequential diversity processor uses no additional inputs and the invention requires no auxiliary equipment

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or signal, like an intentionally defocused image, to remove aberrations in said optical medium” should be deleted since it makes no sense and it is not a claim limitation.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Gonsalves et al. (US 4,309,602).

Regarding claim 1, Gonsalves et al. discloses a video camera with an imaging system and a sequential diversity processor for enhanced image clarification comprising:

an imaging system (see figure 1, column 3, lines 15-33) for producing a sequence of digital images of an object, said object being continuously distorted by a changing optical medium;

an adaptive optic device (adaptive optics 11, figure 1, column 3, lines 15-33) located within said imaging system, controlled by said sequential diversity processor (image signal processor 15 and control system 17, figure 1, column 3, lines 15-47) and arranged for canceling aberrations introduced by said medium, aberrations such as those caused by a turbulent atmosphere or unwanted changes in said imaging system, to thereby provide solely adapted in-focus images of said object;

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a detector array (detector array 13, figure 1, column 3, lines 15-47) within said imaging system arranged for receiving said solely adapted in-focus images and producing digital image representations thereof; and

a sequential diversity processor (image signal processor 15 and control system 17, figure 1, column 3, lines 15-47) connecting with said detector array and said adaptive optic device, said sequential diversity processor receiving said digital image representations from said detector array and providing sequential control signals to said adaptive optic device to enable said adaptive optic device to cancel said aberrations.

#### ***Allowable Subject Matter***

5. Claims 2-3 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LUONG T. NGUYEN whose telephone number is (571)272-7315. The examiner can normally be reached on 7:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID L. OMETZ can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LTN  
11/23/08

/LUONG T NGUYEN/  
Examiner, Art Unit 2622